

<b>Title</b>	<b>Describe land-based wastewater treatment systems in a primary products food processing operation</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>10</b>

<b>Purpose</b>	People credited with this unit standard are able to describe: the mechanisms of land-based wastewater treatment systems; sampling and monitoring requirements for land-based wastewater treatment systems; and land-based wastewater treatment system integration with farming operations and design factors, used in a primary products food processing operation.
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<b>Classification</b>	Primary Products Food Processing > Primary Products Food Processing - Operational Skills
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<b>Available grade</b>	Achieved
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### Guidance Information

- Legislation and references relevant to this unit standard includes but is not limited to:
  - Hazardous Substances and New Organisms Act 1996;
  - Health and Safety at Work Act 2015;
  - Health and Safety in Employment Regulations 1995;
  - Resource Management Act 1991;
  - and any subsequent amendments
- Definitions
 

*Organisational requirements* – instructions to staff on policies and procedures which are documented in memo, electronic or manual format and are available in the workplace.

*Primary products food processing operation* – covers a meat, dairy, seafood, fruit and vegetable and honey processing, food and beverage manufacturing, and other related industries.
- All evidence presented in this unit standard must be in accordance with organisational requirements.

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### Outcomes and performance criteria

#### Outcome 1

Describe the mechanisms of land-based wastewater treatment systems used in a primary products food processing operation.

**Performance criteria**

- 1.1 Describe soil requirements for, and treatment processes occurring in, land-based treatment of wastewater in terms of suitability and structure.
- 1.2 Describe the effects of wastewater irrigation in terms of ground water, surface water, soil and atmosphere.

**Outcome 2**

Describe sampling and monitoring requirements for land-based wastewater treatment systems used in a primary products food processing operation.

**Performance criteria**

- 2.1 Describe process of monitoring land-based treatment.
- 2.2 Describe the process of environmental sampling carried out on land-based treatment systems.

**Outcome 3**

Describe land-based wastewater treatment system integration with farming operations and design factors in a primary products food processing operation.

**Performance criteria**

- 3.1 Describe the process of managing and integrating land-based wastewater treatment systems with farming operations in terms of the effects on the primary products food processing operation and the environment.
- 3.2 Describe the factors to take into account when designing an irrigation system for land-based treatment in terms of their effect on the design process.

<b>Replacement information</b>	This unit standard replaced unit standard 19328.
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<b>Planned review date</b>	31 December 2026
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**Last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	18 June 2015	31 December 2024
Review	2	24 March 2022	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0022
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

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### Comments on this unit standard

Please contact Hanga-Aro-Rau Manufacturing, Engineering, and Logistics Workforce Development Council [qualifications@hangaarorau.nz](mailto:qualifications@hangaarorau.nz) if you wish to suggest changes to the content of this unit standard.